

# 2009 Annual Water Quality Report



THE CITY OF



## 1. A Reminder to Always Use Water Wisely

After three dry years in California, 2010 is shaping up to be about average rainfall. While this brings good news to state depleted water supplies, a few more years of normal wet years will be needed to replenish water reservoirs. In addition, 2007 court-ordered pumping restrictions on water being provided from the Sacramento/San Joaquin Delta have significantly cut water deliveries from the State Water Project (SWP) into the Tri-Valley area. To help with bringing up water reservoir levels and water cutbacks as a result of environmental ruling wise water use will be needed. Governor Schwarzenegger issued a water shortage proclamation requesting Californians reduce their water use by 20 percent along with promoting other water conservation actions.

This year's *Annual Water Quality Report* cover is a reminder to the City's water customers of the need to conserve water and to always use water wisely.

One of the most significant areas of water use for most homes and businesses is water used outside for landscape irrigation. Landscape irrigation water use in Pleasanton represents approximately 30 percent of the City's total annual water demand, increasing to over 50 percent of the total water demand during the hot summer months.

There are many simple and cost-effective measures that City water customers can take to help reduce their outside irrigation water use. Turn your landscape irrigation controller off during the cold and rainy winter months. Keep-

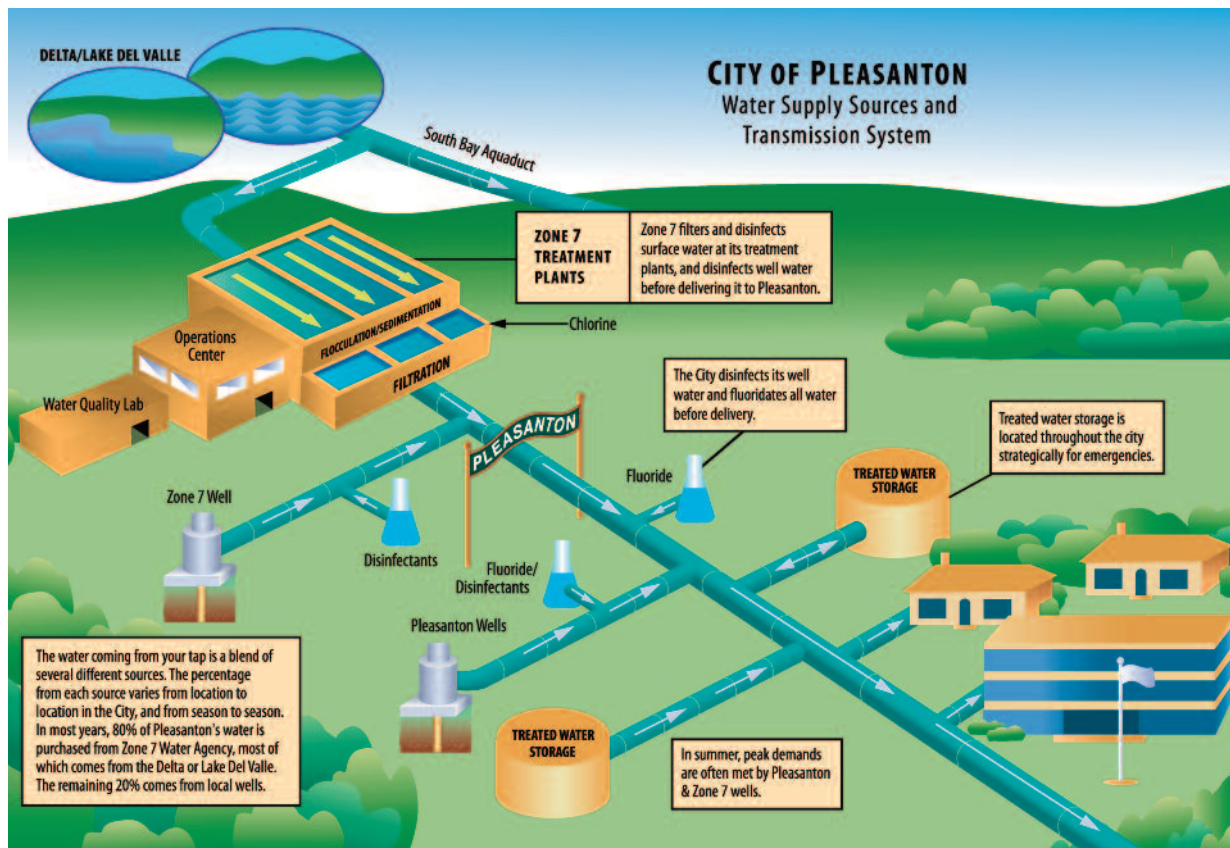


ing turf grasses mowed to a height between 2½ to 3 inches tall helps lower evaporation and promotes lawn root growth. Turf grasses can usually do fine when watered every second or third day, rather than every day.

Water your garden between the hours of 10:00 p.m. and 6:00 a.m. Replacing damaged, bent and poorly spraying sprinkler valves, heads, and drip irrigation emitters can help. Also, consider replacing some of your turf areas with drought-tolerant plants.

Recent designs of spray sprinkler heads have also made these much more efficient and can help deliver water to your landscaping without overspray, misting, etc. A small investment in changing the high water emitting spray heads or bubblers in plant and shrub areas with an efficient drip irrigation system could also save water and deliver water only to the plants' roots. Utilizing mulch and bark around plants, shrubs and trees can also help by reducing evaporation of water, help mitigate weed growth, and result in healthier plants. More advanced irrigation controllers are now equipped with moisture sensor modules to help adjust the amount and duration of water being applied to plants and turf. Knowing how to operate an irrigation controller and effectively maintaining your sprinkler system can make a big difference in your outdoor water use and greatly improve your water conservation results.

*To learn more water conservation tips and to tap into more water conservation information to reduce water use both inside and outside your home or business, please visit the City's website at [www.pleasantonwaterconservation.com](http://www.pleasantonwaterconservation.com).*



## 2. Pleasanton's Water Sources

Zone 7 Water Agency, the Valley's water wholesaler, provides wholesale treated water to four major Valley water retailers, delivers untreated water to a number of agricultural customers, and monitors flood control measures and coordinates groundwater management resources in the Tri-Valley area. Approximately 80% of Pleasanton's water is purchased from Zone 7 and is comprised of treated surface water blended with some local groundwater. The remaining 20% comes from local groundwater pumped from wells owned and operated by the City of Pleasanton. All water sources are disinfected and fluoridated before delivery to our customers.

### Imported Surface Water

The State Water Project (SWP) delivers water to Zone 7. The SWP water originates from the Feather River watershed, where it is stored behind the Oroville Dam before being released into the Sacramento River/ San Joaquin Delta. This water is pumped from the Delta by the State Department of Water Resources (SDWR) to the South Bay Aqueduct (SBA) system, which then flows to the Tri-Valley area. The SBA continues through Alameda County and into Santa Clara County.

### Local Surface Water

Lake Del Valle, our local water storage reservoir, is owned and operated by the SDWR as a water supply reservoir, local flood control resource and recreation area. The water stored at Lake Del Valle comes from local

rainfall and from the SWP. Water from Zone 7's two surface treatment plants (Del Valle and Patterson Pass) undergoes several stages of treatment in order to comply with strict California Department of Public Health (CDPH) regulations.

### Local Groundwater

Groundwater comes from wells and springs. Both the City and Zone 7 use the local groundwater to increase the volume of drinking water available, especially during the hot summer months, when demand for water rises. On any given summer day, over half of the water being delivered in the City may be groundwater. In August 2009, Zone 7 began operating a demineralization plant that will help soften a portion of the water delivered to certain parts of our service area.





### 3. Water Quality is Our Top Priority

The City of Pleasanton is pleased to distribute this report to its water customers. It provides important information about where your water comes from and the work we perform each day to assure the water delivered to your tap is safe to drink. It also provides data about what is in your water and how water quality tests on your drinking water compare to federal and state drinking water standards during calendar year 2009.

#### Pleasanton's Water Quality Goal

The City's goal is to continuously provide a dependable supply of high quality drinking water to its customers. To accomplish this, the treated surface water delivered to customers is continuously monitored at Zone 7's two local water treatment plants. These plants also perform specific chemical and biological tests every four hours to check the purification process. All groundwater sources comply with CDPH testing regulations. In addition, there are 48 sampling points located throughout the City's water distribution system that are monitored and tested daily, weekly and monthly by the City, to assure your drinking water continuously complies with all federal and state drinking water standards. If you have questions regarding the quality of the water supplied to you by the City, this report should provide most of the answers. We appreciate the time you take to read this report and welcome any additional question or comment you may have regarding your water supply. For further information on Pleasanton's water quality or supplies, call the City's Water Quality Lab at 925-931-5510, or email your questions to us through the City's web page at [www.ci.pleasanton.ca.us](http://www.ci.pleasanton.ca.us).

### 4. Chemicals & Minerals in Water

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Drinking water, including bottled waters, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the *USEPA Safe Drinking Water Hotline* at 800-426-4791. The disinfectant, Chloramine (a combination of chlorine and ammonia), is used to disinfect both Zone 7 and the City's water. This disinfectant is utilized to protect public health by destroying disease-causing organisms that may be present in water supplies. Chloramines, at the low levels used, will not cause any health problems for the general public. However, aquarium owners and home dialysis patients must take special precautions before chloraminated water can be used in aquariums or home kidney dialysis machines, due to the very small amount of ammonia present in the water.

### Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the *Safe Drinking Water Hotline* at 800-426-4791.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing.

City of Pleasanton is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the *Safe Drinking Water Hotline* or at <http://www.epa.gov/safewater/lead>.

### 5. Definition of Terms

The following terms are used in the water industry to define contaminant levels. Pleasanton's drinking water is tested at the levels in the table to the far right.

**AL** - Action Level: The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

**MCL** - Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water.

**MCLG** - Maximum Contaminant Level Goal: The level of contaminant below which there is no known or expected risk to health - set by the USEPA.

**MRDL** - Maximum Residual Disinfectant Level: The highest level of a disinfectant that is allowed in drinking water.

**MRDLG** - Maximum Residual Disinfectant Level Goal: The level of a disinfectant below which there is no known or expected risk to health.

**NA** - Not Applicable

**ND** - Not Detected: Concentration not found above Minimum Reporting Limit (MRL) or Detection Limit for Purpose of Reporting (DLR) set by CDPH.

**NL** - Notification Level: The concentration of a contaminant, while not posing a significant health risk, that warrants a precautionary notification of CDPH.

**PHG** - Public Health Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California EPA.

**TT** - Treatment Technique: A required process for reducing contaminant levels.

**Turbidity** - A measure of the cloudiness of the water. Turbidity levels are a good indicator of the effectiveness of the treatment plant's filtration system.

*The following contaminants may also be found in drinking water:*

**TTHMs** (Total Trihalomethanes): TTHMs are by-products of drinking water disinfected with chlorine compounds. Some people who use water containing TTHMs in excess of the MCL, over many years, may experience liver, kidney, or central nervous system problems and may have an increased risk of getting cancer. Pleasanton's water sources are below the MCLs for TTHMs.

**MTBE** (Methyl Tertiary Butyl Ether): Pleasanton's well water sources were monitored for MTBE in 2005 and 2008, and it was not detected (next monitoring in 2011). Zone 7's sources were monitored in 2009. The current detection limit for reporting purposes is 3 parts per billion (ppb). MTBE was not detected in any of Zone 7's sources in the past year.

**Nitrate:** If found in drinking water at levels above 45 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

**Radon:** A radioactive gas found throughout the United States that you cannot see, taste, or smell. Currently, there is no federal regulation on radon levels in drinking water. The California Department of Public Health is awaiting action by the USEPA on a proposed radon level in drinking water. Radon has been previously tested and found in the City and Zone 7's groundwater wells at levels of 160 to 350 pico Curies per liter (pCi/L). For additional information, call your State Radon Program at 800-745-7236 or call EPA's Radon Hotline at 800-767-7236.

**Table Units**

pCi/L	Picocuries per Liter
mg/L	Milograms per Liter or parts per million
µg/L	Micrograms per Liter or parts per billion
ng/L	Nanograms per Liter or parts per trillion
umhos/cm	Microsiemens per Centimeter
NTU	Nephelometric Turbidity Unit

## 6. Understanding the Summary

Primary Drinking Water Standards (PDWS) are set after considerable research and data have been analyzed by health experts. These standards, called Maximum Contaminant Levels (MCLs) are set by USEPA and strictly enforced by the California Department of Public Health (CDPH). Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible.

Secondary Standards are based upon qualities of water such as taste, odor, color or clarity of the water. These standards, called Secondary Maximum Contaminant Levels (SMCLs) set limits on substances that may influence customer acceptance of the water and are established by the CDPH.

**Detected Contaminants:** The table at right shows the level of each detected regulated contaminant, the average level of each detected contaminant (Average), and, if more than one sample was collected, the range of levels found during the 2009 calendar year (Range).

In addition to the regulated contaminants, Zone 7 and the City monitor a large number of additional "unregulated contaminants". Unregulated contaminant monitoring helps EPA and CDPH to determine where certain contaminants occur and whether the contaminants need to be regulated in the future. The unregulated organic compounds are monitored on the same schedule as the regulated contaminants. All the additional unregulated organic compounds the City tested for during 2009 were Not Detected (ND).

In order to ensure that tap water is safe to drink, USEPA and the CDPH prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The limits for contaminants in bottled water provide the same level of protection.

Contaminants that may be present in source water include the following: microbial contaminants, such as viruses and bacteria, may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

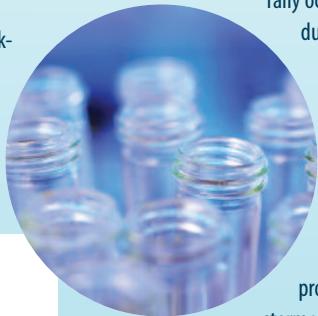
Pesticides and herbicides may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

Radioactive contaminants can be naturally occurring or be the result of oil and gas production and mining activities.

Pleasanton sampling frequency meets, and for some parameters, is more frequent than CDPH requirements. CDPH allows monitoring for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Hence, some of our data, though representative, may have been sampled prior to 2009.

*A Drinking Water Source Assessment and Protection Program* (DWSAP) was conducted for the City of Pleasanton Wells #5, #6 and #8 in December 2002. No contaminants have been detected in the City's groundwater supply. However, all groundwater sources are considered vulnerable to activities located near the drinking water supply source. DWSAP is updated whenever new water sources are added. A completed copy of the assessment may be viewed at the City Clerk Office, 123 Main Street, Pleasanton.



## 7. 2009 Water Quality Results

The following is a list of contaminants that may be found in drinking water and their sources. Also included in the table below is a summary of all chemical analyses required by the USEPA and CDPH for Pleasanton's water supply during calendar year 2009<sup>1</sup>.

**PRIMARY STANDARDS**—Mandatory health-related standards established by the State of California Department of Public Health

Contaminant	MCL	PHG MCLG** MRDLG**	Zone 7 Water Agency <sup>2</sup>			City of Pleasanton <sup>3</sup>			Sources
			Highest Running Annual Average	Range of Individual Samples		Highest Running Annual Average	Range of Individual Samples		
Total Trihalomethanes (TTHMs) (µg/L)	80	NA	37	2–70		34	ND–120	By-product of drinking water chlorination	
Haloacetic Acids (HAA5) (µg/L)	60	NA	17	ND–28		13	0.5–54	By-product of drinking water chlorination	
			Highest % of Monthly Positive Samples			Highest % of Monthly Positive Samples			
Total Coliform Bacteria	More than 5% of monthly samples are positive	0	0%			1.6%			Naturally present in the environment
Chloramines as Chlorine (mg/L)	Maximum Residual Disinfectant Level (MRDL)=4.0	4**	Running Annual Average (RAA) 2.3	Range of Monthly Avg. Chloramines 2.2–2.5		Running Annual Average (RAA) 1.8	Range of Monthly Avg. Chloramines 1.6–2.1	Drinking water disinfectant added for treatment	
EPA/State Lead Copper Rule—Monitored at Customers Tap—2007 <sup>4</sup>						No. Collected	90th Percentile	No. of Samples > Action Level	
Lead (µg/L)	AL=15	0.2				44	ND	0	Internal corrosion of household plumbing
Copper (mg/L)	AL=1.3	0.3				44	0.08	0	Internal corrosion of household plumbing

## WATER SUPPLY SOURCES

Contaminant	MCL	PHG MCLG*	Treated Surface Water		Groundwater		Groundwater		
					Average	Range of Individual Samples	Average	Range of Individual Samples	
Turbidity (NTU)	TT=1 NTU Maximum	NA	Highest Level Found=0.15 TU		0.07	0.05–0.14	0.12	0.06–0.16	Soil runoff
	TT=95% of Samples ≤ 0.3 NTU	NA	% of Samples ≤ 0.3 NTU=100		Not Applicable		Not Applicable		
Total Organic Carbon (mg/L)	TT=Quarterly RAA Removal Ratio ≥ 1.0	NA	Lowest Quarterly RAA Ratio=1.6		Not Applicable		Not Applicable		Runoff/leaching from natural deposits
Inorganic Chemicals			Average	Range	Average	Range	Average	Range	
Arsenic (µg/L)	10	.004	ND	ND	ND	ND-2	ND	ND	Erosion of natural deposits
Barium (µg/L)	1000	2000	ND	ND	180	120–290	200	150–250	Erosion of natural deposits
Selenium (µg/L)	50	50*	ND	ND	2	ND–12	ND	ND	Erosion of natural deposits
Fluoride (mg/L) (Naturally Occurring) <sup>a</sup>	2	1	0.1	0.1	0.1	0.1–0.2	0.1	0.1–0.13	Erosion of natural deposits
Nitrate (as NO3) (mg/L)	45	45	ND	ND–4.8	17	13–29	14	9–18	Erosion of natural deposits
Nitrate + Nitrite as N (mg/L)	10	10	NA	NA	NA	NA	3	2–4	Erosion of natural deposits

**Regulated Contaminants with Secondary MCLs**, established by the State of California Department of Public Health

Odor (TON—Threshold Odor Number)	3	—	1	0–1	0	0	1	1	Naturally occurring organic materials
Conductivity (umhos/cm)	1600	—	573	325–813	937	647–1562	857	680–990	Substances that form ions in water
Chloride (mg/L)	500	—	104	39–160	82	42–182	79	59–91	Naturally occurring organic materials
Sulfate (mg/L)	500	—	31	14–67	60	31–116	54	45–60	Runoff/leaching from natural deposits
Total Dissolved Solids (mg/L)	1000	—	310	172–447	564	358–1013	500	400–590	Runoff/leaching from natural deposits

**Additional Parameters**, included to assist consumers in making health or economic decisions, i.e. low sodium diet, water softening, etc.

Corrosivity (Units)*	—	—	12.0	11.2–12.3	12.2	12–13	13	13	Runoff/leaching from natural deposits
Alkalinity (as CaCO <sub>3</sub> )(mg/L)	—	—	77	49–145	300	217–443	267	210–310	Runoff/leaching from natural deposits
Boron (µg/L)	NL=1000	—	130	ND–320	473	220–1020	360	320–390	Runoff/leaching from natural deposits
Hardness (as CaCO <sub>3</sub> )(mg/L)	—	—	105	68–159	368	241–632	367	290–430	Runoff/leaching from natural deposits
Calcium (mg/L)	—	—	22	13–36	71	42–114	84	69–98	Runoff/leaching from natural deposits
Magnesium (mg/L)	—	—	13	8–18	46	32–85	38	29–45	Runoff/leaching from natural deposits
Potassium (mg/L)	—	—	2.7	1.4–4.0	1.9	1.4–3.0	1.9	1.7–2.1	Runoff/leaching from natural deposits
Sodium (mg/L)	—	—	69	33–99	61	39–105	42	36–50	Runoff/leaching from natural deposits
pH (Units)	—	—	8.5	8.0–8.8	7.6	7.3–7.9	7.8	7.7–7.9	Runoff/leaching from natural deposits
Silica (mg/L)	—	—	11	7–15	25	21–28	25	24–26	Runoff/leaching from natural deposits

EPA UCMR 2 Unregulated Contaminated Monitoring Regulation<sup>7</sup> (2008)

N-nitrosodimethylamine (NDMA) (ng/L)	Sample Site	Average (ng/L)	Range (ng/L)					By-product of chlorination at treatment plants that use chloramines
	Del Valle CWE	2.2	ND–6.4					
	Patterson Pass CWE	2.3	ND–5.1					
	Livermore Turnout 9	ND	ND–6.2					
	Pleasanton Carriage Dr.	ND	ND–3.3					

<sup>1</sup> Pleasanton and Zone 7 also test for a number of additional constituents in the water supply sources. Test results for all of these constituents were non-detected and therefore not included in the table. A complete list of all constituents tested during 2009 is available upon request. <sup>2</sup> Zone 7 Water Agency supplies surface and groundwater to the City of Pleasanton. For more information regarding this source, call 925-447-0533. <sup>3</sup> The City of Pleasanton owns and operates three groundwater wells for drinking water purposes. For more information on this source, please call 925-931-5510. <sup>4</sup> Tested every 3 years; next scheduled testing in 2010. <sup>5</sup> The City treats the water delivered to your tap by adding fluoride to the naturally occurring level in order to help prevent dental caries in consumers. The fluoride levels in the treated water are maintained within a range of 0.7 to 1.3 ppm, as required by CDPH regulations. <sup>6</sup> Zone 7 strives to supply non-aggressive water (corrosivity >12) by pH adjustment on surface treated water. <sup>7</sup> ND—Not detected at or above 2.0 mg/L. List 1 and List 2 contaminants available upon request.

## 8. Your Water Meets All Safe Drinking Water Standards

The technical and analytical water quality information presented in this report is required by State health regulations. These regulations require water suppliers to inform customers about where their water comes from; what is in their water; and any violation of safe drinking water standards that may have occurred during this past reporting period. This report provides results of all tests required to be performed on Pleasanton's water supplies during 2009. We are happy to report that all 2009 water quality tests confirmed that water delivered to your tap met all applicable federal and state drinking water standards without any violations.

This report also includes information regarding steps taken by the City and Zone 7 to improve drinking water delivered to customers in 2009, and opportunities for the public to participate in decisions that affect their drinking water quality. Phone numbers and web page addresses of the City and other public agencies responsible for water billing, delivery, supply, and water quality are also presented herein.



This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

Este informe contiene informacion muy importante sobre su agua beber. Traduzcalo o hable con alguien que lo entienda bien.

此份有關你的食水報告,內有重要資料和訊息,請找他人為你翻譯及解釋清楚。

यह सूचना महत्वपूर्ण है ।  
कृपा करके किसी से :सका अनुवाद करायें ।

이 안내는 매우 중요합니다.  
본인을 위해 번역인을 사용하십시오.

Mahalaga ang impormasyong ito. Mangyaring ipasalin ito.

### Included in this report:

1. A Reminder to Always Use Water Wisely
2. Pleasanton's Water Sources
3. Water Quality is Our Top Priority
4. Chemicals & Minerals in Water
5. Definition of Terms
6. Understanding the Summary
7. 2009 Water Quality Results
8. Your Water Meets All Safe Drinking Water Standards
9. Public Involvement & Contact Information

## 9. Public Involvement

Zone 7, the Valley's water wholesaler, and the City of Pleasanton encourage citizens who would like to become involved in local water issues and water quality topics to attend Zone 7's regular board meetings, which are held the third Wednesday of each month at 7:00 p.m. at the Zone 7 offices in Livermore at 100 North Canyons Parkway. These meetings are open to the public. Agendas and other pertinent information on these meetings are available on the Zone 7 web site at [www.zone7water.com](http://www.zone7water.com). For further assistance, please refer to the contact information below:

### Contact Information

**Water Quality Information** 925-931-5510  
M-F 7:00 AM-3:30 PM  
[sclough@ci.pleasanton.ca.us](mailto:sclough@ci.pleasanton.ca.us)

*Para informacion en español, llamar al telefono* 925-931-5500

**Utility Billing Information/Water Conservation Material & Programs** 925-931-5425 or 925-931-5500  
M-F 7:30 AM-4:30 PM

**Emergency Water Service** 925-931-5500  
M-F 7:00 AM-3:30 PM

**After hours and weekends, call Pleasanton Police Dispatch** 925-931-5100

**Zone 7 Water Agency** 925-454-5000  
M-F 8:00 AM-5:00 PM  
[www.zone7water.com](http://www.zone7water.com)

**Alameda County Household Hazardous Waste Collection Sites** 510-670-6460  
M-F 8:30 AM-5:00 PM  
[www.household-hazwaste.org](http://www.household-hazwaste.org)

**EPA Safe Drinking Water Hotline** 800-426-4791  
[www.epa.gov/safewater/hfacts.html](http://www.epa.gov/safewater/hfacts.html)

**EPA's Radon Hotline** 800-767-7236  
[www.epa.gov/radon](http://www.epa.gov/radon)

To view the Water Quality Report online, please visit  
[www.ci.pleasanton.ca.us/pdf/awqr09.pdf](http://www.ci.pleasanton.ca.us/pdf/awqr09.pdf)

**Saving Water Saves Money!** Households can save hundreds of dollars a year on utility and water bills by using energy-efficient appliances or by simply using existing appliances more efficiently.



For any further questions you may have regarding the City's water supplies or quality, you can contact us by visiting the City's web site at [www.ci.pleasanton.ca.us](http://www.ci.pleasanton.ca.us).

Printed on recycled paper using soy-based inks